

Human GPR56-1:	Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Leu	Phe	Leu	Leu	Ser	Leu	
Human GPR56-2:	Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Leu	Phe	Leu	Leu	Ser	Leu	
Human GPR56-3:	Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Leu	Phe	Leu	Leu	Ser	Leu	
Human GPR56-4:	Met	Thr	Pro	Gln	Ser	Leu	Leu	Gln	Thr	Leu	Phe	Leu	Leu	Ser	Leu	
Murine GPR56:	Met	Ala	Val	Gln	Val	Leu	Arg	Gln	Met	Val	Tyr	Phe	Leu	Leu	Ser	Leu
	1			5		10			15							
Human GPR56-1:	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	Asp	Phe
Human GPR56-2:	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	Asp	Phe
Human GPR56-3:	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	Asp	Phe
Human GPR56-4:	Leu	Phe	Leu	Val	Gln	Gly	Ala	His	Gly	Arg	Gly	His	Arg	Glu	Asp	Phe
Murine GPR56:	Phe	Ser	Leu	Val	Gln	Gly	Ala	His	Ser	Gly	Ser	Pro	Arg	Glu	Asp	Phe
			20		25				30							
Human GPR56-1:	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	Leu	His	Tyr
Human GPR56-2:	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	Leu	His	Tyr
Human GPR56-3:	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	Leu	His	Tyr
Human GPR56-4:	Arg	Phe	Cys	Ser	Gln	Arg	Asn	Gln	Thr	His	Arg	Ser	Ser	Leu	His	Tyr
Murine GPR56:	Arg	Phe	Cys	Gly	Gln	Arg	Asn	Gln	Thr	Gln	Gln	Ser	Thr	Leu	His	Tyr
				35		40			45							
Human GPR56-1:	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	Ser	Glu	Glu	Ala
Human GPR56-2:	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	Ser	Glu	Glu	Ala
Human GPR56-3:	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	Ser	Glu	Glu	Ala
Human GPR56-4:	Lys	Pro	Thr	Pro	Asp	Leu	Arg	Ile	Ser	Ile	Glu	Asn	Ser	Glu	Glu	Ala
Murine GPR56:	Asp	Gln	Ser	Ser	Glu	Pro	His	Ile	Phe	Val	Trp	Asn	Thr	Glu	Glu	Thr
				50		55			60							

FIGURE 1a

Human GPR56-1:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-2:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-3:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-4:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Murine GPR56:	Leu	Thr	Thr	Arg	Ala	Pro	Phe	Leu	Ala	Ala	Pro	Asp	Ile	Pro	Arg	Phe
	65							70				75				80
Human GPR56-1:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-2:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-3:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-4:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Murine GPR56:	Phe	Pro	Glu	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Ser	Arg
							85				90				95	
Human GPR56-1:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-2:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-3:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-4:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Murine GPR56:	His	Thr	Gly	Arg	Leu	His	Leu	Arg	Tyr	Gly	Lys	His	Asp	Tyr	Leu	Leu
							100				105				110	
Human GPR56-1:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-2:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-3:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-4:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Murine GPR56:	Ser	Ser	Gln	Ala	Ser	Arg	Leu	Leu	Cys	Phe	Gln	Lys	Gln	Glu	Gln	Ser
								115				120				125

FIGURE 1b

Human GPR56-1:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-2:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-3:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-4:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Murine GPR56:	Leu	Lys	Gln	Gly	Ala	Pro	Leu	Ile	Ala	Thr	Ser	Val	Ser	Ser	Trp	Gln
																140
																145
Human GPR56-1:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser
Human GPR56-2:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser
Human GPR56-3:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser
Human GPR56-4:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Phe	Ser
Murine GPR56:	Ile	Pro	Gln	Asn	Thr	Ser	Leu	Pro	Gly	Ala	Pro	Ser	Phe	Ile	Phe	Ser
																150
																155
Human GPR56-1:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met
Human GPR56-2:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met
Human GPR56-3:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met
Human GPR56-4:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp	Met
Murine GPR56:	Phe	His	Asn	Ala	Pro	His	Lys	Val	Ser	His	Asn	Ala	Ser	Val	Asp	Met
																165
																170
Human GPR56-1:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His
Human GPR56-2:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His
Human GPR56-3:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His
Human GPR56-4:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys	His
Murine GPR56:	Cys	Asp	Leu	Lys	Lys	Glu	Leu	Gln	Gln	Leu	Ser	Arg	Tyr	Leu	Gln	His
																180
																185
																190

FIGURE 1C

Human	GPR56-1:	Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln	200
Human	GPR56-2:	Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln	205
Human	GPR56-3:	Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln	210
Human	GPR56-4:	Pro Gln Lys Ala Ser Arg Arg Pro Ser Ala Ala Pro Ala Ser Gln Gln	215
Murine	GPR56:	Pro Gln Lys Ala Ala Lys Arg Pro Thr Ala Ala phe Ile Ser Gln Gln	220
Human	GPR56-1:	Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp	225
Human	GPR56-2:	Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp	230
Human	GPR56-3:	Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp	235
Human	GPR56-4:	Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val Arg Phe Met Gly Asp	240
Murine	GPR56:	Leu Gln Ser Leu Glu Ser Lys Leu Thr Ser Val ser Phe Leu Gly Asp	245
Human	GPR56-1:	Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu	250
Human	GPR56-2:	Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu	255
Human	GPR56-3:	Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu	260
Human	GPR56-4:	Met Val Ser Phe Glu Glu Asp Arg Ile Asn Ala Thr Val Trp Lys Leu	265
Murine	GPR56:	thr Leu Ser Phe Glu Glu Asp Arg val Asn Ala Thr Val Trp Lys Leu	270
Human	GPR56-1:	Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu	275
Human	GPR56-2:	Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu	280
Human	GPR56-3:	Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu	285
Human	GPR56-4:	Gln Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Glu	290
Murine	GPR56:	Pro Pro Thr Ala Gly Leu Gln Asp Leu His Ile His Ser Arg Gln Lys Glu	295

FIGURE 1d

Human GPR56-1:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-2:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-3:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-4:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Murine GPR56:	Glu	Glu	Gln	Ser	Glu	Val	Gln	Ala	Tyr	Ser	Leu	Leu	Leu	Pro	Arg	Ala
						260	265	270								
Human GPR56-1:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-2:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-3:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-4:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Murine GPR56:	Val	Phe	Gln	Gln	Thr	Arg	Gly	Arg	Arg	Arg	Asp	Asp	Ala	Lys	Arg	Leu
						275	280	285								
Human GPR56-1:	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn	Ser
Human GPR56-2:	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn	Ser
Human GPR56-3:	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn	Ser
Human GPR56-4:	Leu	Leu	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn	Ser
Murine GPR56:	Leu	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn	Ser
						290	295	300								
Human GPR56-1:	Ser	Gln	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn	Thr
Human GPR56-2:	Ser	His	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn	Thr
Human GPR56-3:	Ser	Gln	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn	Thr
Human GPR56-4:	Ser	Gln	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn	Thr
Murine GPR56:	Ser	Gln	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn	Thr
						305	310	315								
																320

FIGURE 1e

Human GPR56-1:	Lys Val Ala Asn Leu Thr Glu Pro Val Val	Leu Thr Phe Gln His Gln
Human GPR56-2:	Lys Val Ala Asn Leu Thr Glu Pro Val Val	Leu Thr Phe Gln His Gln
Human GPR56-3:	Lys Val Ala Asn Leu Thr Glu Pro Val Val	Leu Thr Phe Gln His Gln
Human GPR56-4:	Lys Val Ala Asn Leu Thr Glu Pro Val Val	Leu Thr Phe Gln His Gln
Murine GPR56:	Lys Val Thr Asn Leu Ser Asp Pro Val Val	Leu Thr Phe Gln His Gln
		335
		325
		330

Human GPR56-1:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-2:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-3:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-4:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Murine GPR56:	Pro	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp

Human GPR56-1:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-2:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-3:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-4:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Murine GPR56:	Val	Ser	Arg	Asp	Thr	Gln	Thr	Ser	Cys	Leu	Cys	Asn	His	Leu	Thr	Tyr

FIGURE 1f

Human GPR56-1:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-2:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-3:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Human GPR56-4:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys	
Murine GPR56:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Thr	Glu	Val	Gl	Ala	Thr	His	Lys	
																400	
Human GPR56-1:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-2:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-3:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Human GPR56-4:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu	
Murine GPR56:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Th	Ser	Ala	Leu
																405	
Human GPR56-1:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-2:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-3:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu	
Human GPR56-4:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---	
Murine GPR56:	Ala	Cys	Val	Phe	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---	
																420	
Human GPR56-1:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-2:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-3:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-4:	---	---	---	---	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
Murine GPR56:	---	---	---	---	Arg	Lys	ser	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
																425	
Human GPR56-1:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-2:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-3:	Pro	Cys	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn	
Human GPR56-4:	---	---	---	---	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
Murine GPR56:	---	---	---	---	Arg	Lys	ser	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met	Asn
																435	
																440	
																445	

FIGURE 1g

Human GPR56-1:	Leu Leu Leu Ala Val Phe Leu Asp Thr Ser Phe Leu Leu Ser Glu	450	Human GPR56-1:	Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile	455	Human GPR56-1:	Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu	485	Human GPR56-1:	Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val	500
Human GPR56-2:	Leu Leu Leu Ala Val Phe Leu Asp Thr Ser Phe Leu Leu Ser Glu	450	Human GPR56-2:	Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile	455	Human GPR56-2:	Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu	485	Human GPR56-2:	Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val	500
Human GPR56-3:	Leu Leu Leu Ala Val Phe Leu Asp Thr Ser Phe Leu Leu Ser Glu	450	Human GPR56-3:	Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile	455	Human GPR56-3:	Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu	485	Human GPR56-3:	Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val	500
Human GPR56-4:	Leu Leu Leu Ala Val Phe Leu Asp Thr Ser Phe Leu Leu Ser Glu	450	Human GPR56-4:	Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Ile	455	Human GPR56-4:	Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu	485	Human GPR56-4:	Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val	500
Murine GPR56:	Leu Leu Ser Ala Val Phe Leu Leu Asp Val Ser Phe Leu Leu Ser Glu	450	Murine GPR56:	Pro Val Ala Leu Thr Gly Ser Glu Ala Gly Cys Arg Ala Ser Ala Met	455	Murine GPR56:	Phe Leu His Phe Ser Leu Leu Thr Cys Leu Ser Trp Met Gly Leu Glu	485	Murine GPR56:	Gly Tyr Asn Leu Tyr Arg Leu Val Val Glu Val Phe Gly Thr Tyr Val	500
		460			465			490			510
		470			475			495			

FIGURE 1h

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Human GPR56-1:	Pro	Gly	Tyr	Leu	Lys	Leu	Ser	Ala	Met	Gly	Trp	Gly	Phe	Pro	Ile
Human GPR56-2:	Pro	Gly	Tyr	Leu	Lys	Leu	Ser	Ala	Met	Gly	Trp	Gly	Phe	Pro	Ile
Human GPR56-3:	Pro	Gly	Tyr	Leu	Lys	Leu	Ser	Ala	Met	Gly	Trp	Gly	Phe	Pro	Ile
Human GPR56-4:	Pro	Gly	Tyr	Leu	Lys	Leu	Ser	Ala	Met	Gly	Trp	Gly	Phe	Pro	Ile
Murine GPR56:	Pro	Gly	Tyr	Leu	Lys	Leu	Ser	Ile	Val	Gly	Trp	Gly	Phe	Pro	Val
															520
															525
Human GPR56-1:	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asp	Asn	Tyr	Gly
Human GPR56-2:	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asp	Asn	Tyr	Gly
Human GPR56-3:	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asp	Asn	Tyr	Gly
Human GPR56-4:	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asp	Asn	Tyr	Gly
Murine GPR56:	Phe	Leu	Val	Thr	Leu	Val	Ala	Leu	Val	Asp	Val	Asn	Asn	Tyr	Gly
															530
															535
Human GPR56-1:	Ile	Ile	Leu	Ala	Val	His	Arg	Thr	Pro	Glu	Gly	Val	Ile	Tyr	Pro
Human GPR56-2:	Ile	Ile	Leu	Ala	Val	His	Arg	Thr	Pro	Glu	Gly	Val	Ile	Tyr	Pro
Human GPR56-3:	Ile	Ile	Leu	Ala	Val	His	Arg	Thr	Pro	Glu	Gly	Val	Ile	Tyr	Pro
Human GPR56-4:	Ile	Ile	Leu	Ala	Val	His	Arg	Thr	Pro	Glu	Gly	Val	Ile	Tyr	Pro
Murine GPR56:	Ile	Ile	Leu	Ala	Val	Arg	Arg	Thr	Pro	Glu	Arg	Val	Thr	Tyr	Pro
															540
															545
Human GPR56-1:	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	Tyr	Ile	Thr	Asn	Leu
Human GPR56-2:	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	Tyr	Ile	Thr	Asn	Leu
Human GPR56-3:	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	Tyr	Ile	Thr	Asn	Leu
Human GPR56-4:	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	Tyr	Ile	Thr	Asn	Leu
Murine GPR56:	Met	Cys	Trp	Ile	Arg	Asp	Ser	Leu	Val	Ser	Tyr	Val	Thr	Asn	Leu
															550
															555
Human GPR56-1:															
Human GPR56-2:															
Human GPR56-3:															
Human GPR56-4:															
Murine GPR56:															
															565
															570
															575

FIGURE 1i

Human GPR56-1:	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	Met	Ala	Met	Leu	Ala	Thr	Met
Human GPR56-2:	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	Met	Ala	Met	Leu	Ala	Thr	Met
Human GPR56-3:	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	Met	Ala	Met	Leu	Ala	Thr	Met
Human GPR56-4:	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	Met	Ala	Met	Leu	Ala	Thr	Met
Murine GPR56:	Leu	Phe	Ser	Leu	Val	Phe	Leu	Phe	Asn	Leu	Ala	Met	Leu	Ala	Thr	Met
										585						590
Human GPR56-1:	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg	Pro	His	Thr	Gln	Lys	Trp	Ser	His
Human GPR56-2:	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg	Pro	His	Thr	Gln	Lys	Trp	Ser	His
Human GPR56-3:	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg	Pro	His	Thr	Gln	Lys	Trp	Ser	His
Human GPR56-4:	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg	Pro	His	Thr	Gln	Lys	Trp	Ser	His
Murine GPR56:	Val	Val	Gln	Ile	Leu	Arg	Leu	Arg	Pro	His	Ser	Gln	Asn	Trp	Pro	His
										595						600
Human GPR56-1:	Val	Leu	Thr	Leu	Gly	Leu	Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	
Human GPR56-2:	Val	Leu	Thr	Leu	Gly	Leu	Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	
Human GPR56-3:	Val	Leu	Thr	Leu	Gly	Leu	Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	
Human GPR56-4:	Val	Leu	Thr	Leu	Gly	Leu	Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	
Murine GPR56:	Val	Leu	Thr	Leu	Gly	Leu	Ser	Leu	Val	Leu	Gly	Leu	Pro	Trp	Ala	
										610						615
Human GPR56-1:	Leu	Ile	Phe	Phe	Ser	Phe	Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu
Human GPR56-2:	Leu	Ile	Phe	Phe	Ser	Phe	Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu
Human GPR56-3:	Leu	Ile	Phe	Phe	Ser	Phe	Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu
Human GPR56-4:	Leu	Ile	Phe	Phe	Ser	Phe	Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Val	Leu
Murine GPR56:	Leu	Val	Phe	Phe	Ser	Phe	Ala	Ser	Gly	Thr	Phe	Gln	Leu	Val	Ile	Leu
										625						630
Human GPR56-1:																635
Human GPR56-2:																640
Human GPR56-3:																
Human GPR56-4:																
Murine GPR56:																

FIGURE 1j

Human GPR56-1:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Ile	Phe	Ile
Human GPR56-2:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Ile	Phe	Ile
Human GPR56-3:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Ile	Phe	Ile
Human GPR56-4:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Ile	Phe	Ile
Human GPR56-5:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Ile	Phe	Ile
Murine GPR56:									Tyr	Gln	Gly	Phe	Ile	Phe	Leu
															655
Human GPR56-1:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro
Human GPR56-2:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro
Human GPR56-3:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro
Human GPR56-4:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro
Murine GPR56:	Trp	Tyr	Trp	Ser	Met	Arg	Ph	Gln	Ala	Gln	Gly	Gly	Pro	Ser	Pro
															660
Human GPR56-1:	Lys	Ser	Asn	Ser	Asp	Cys	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser
Human GPR56-2:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser
Human GPR56-3:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser
Human GPR56-4:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser
Murine GPR56:	Lys	Asn	Ser	Asp	Ser	Ala	Lys	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
															675
Human GPR56-1:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-2:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-3:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-4:	Ser	Ser	Ser	Arg	Ile										
Murine GPR56:	Ser	Ser	Ser	Arg	Ile										680
															685
Human GPR56-1:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-2:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-3:	Ser	Ser	Ser	Arg	Ile										
Human GPR56-4:	Ser	Ser	Ser	Arg	Ile										
Murine GPR56:	Ser	Ser	Ser	Arg	Ile										690

FIGURE 1K

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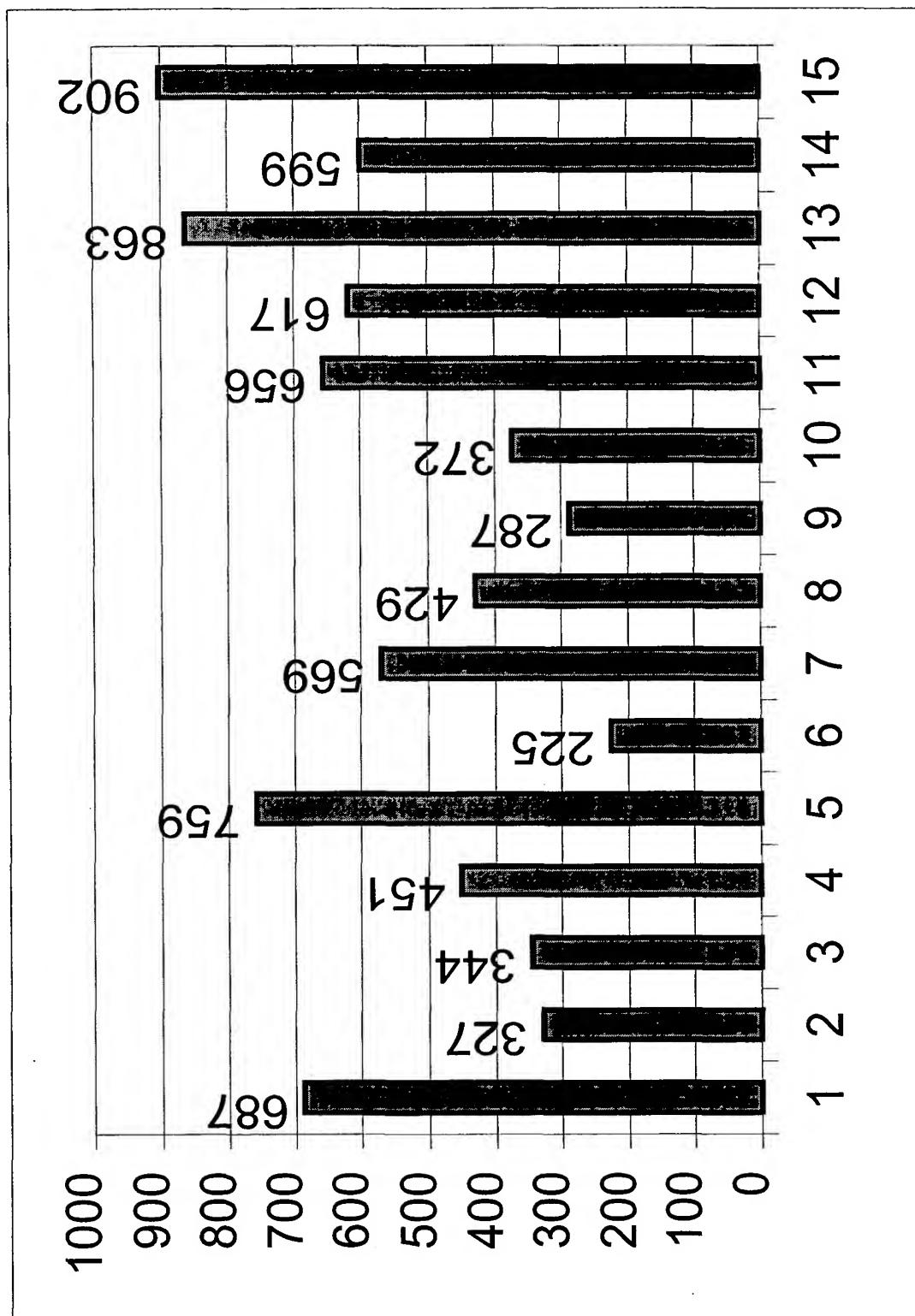


FIGURE 2a

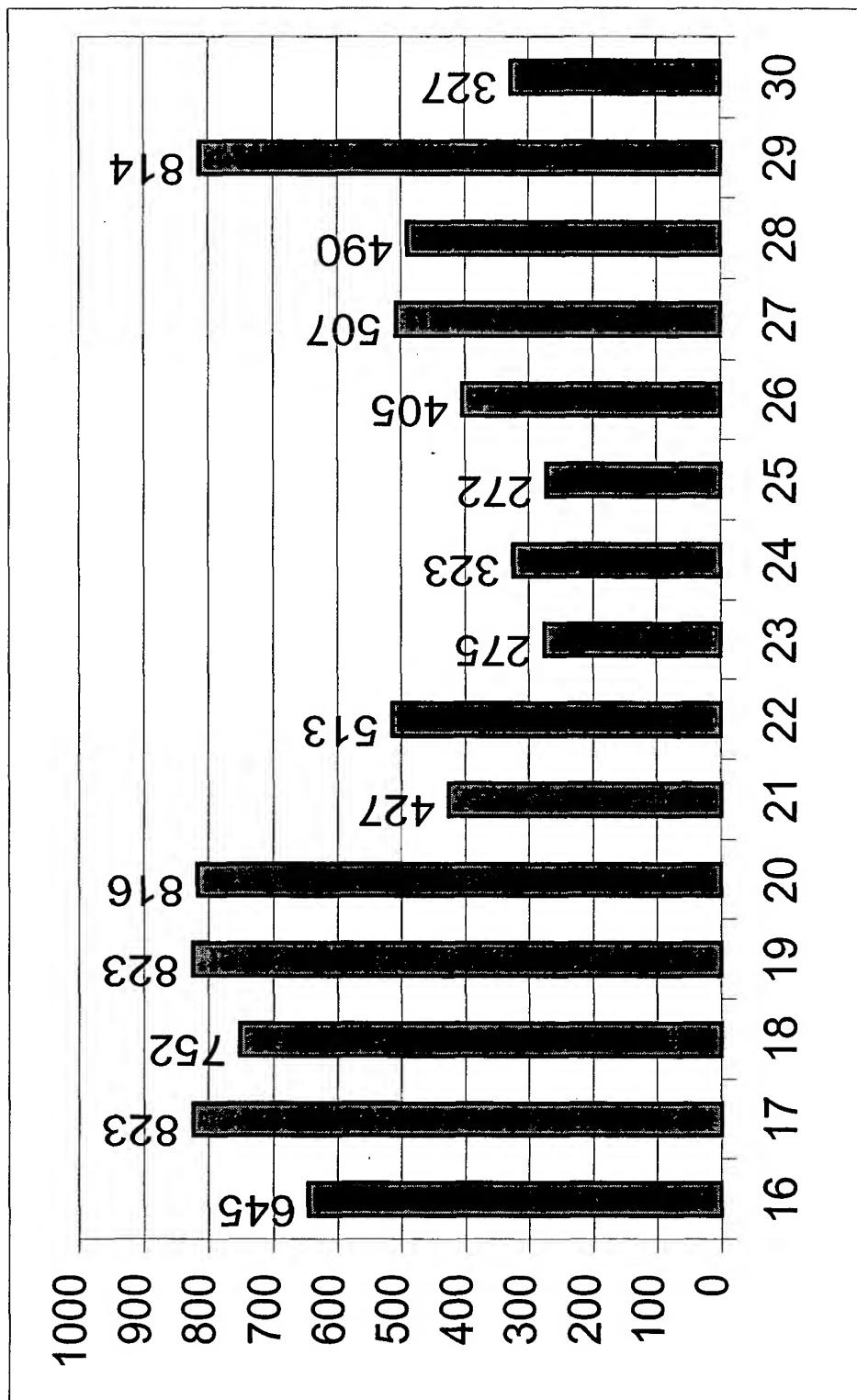


FIGURE 2b

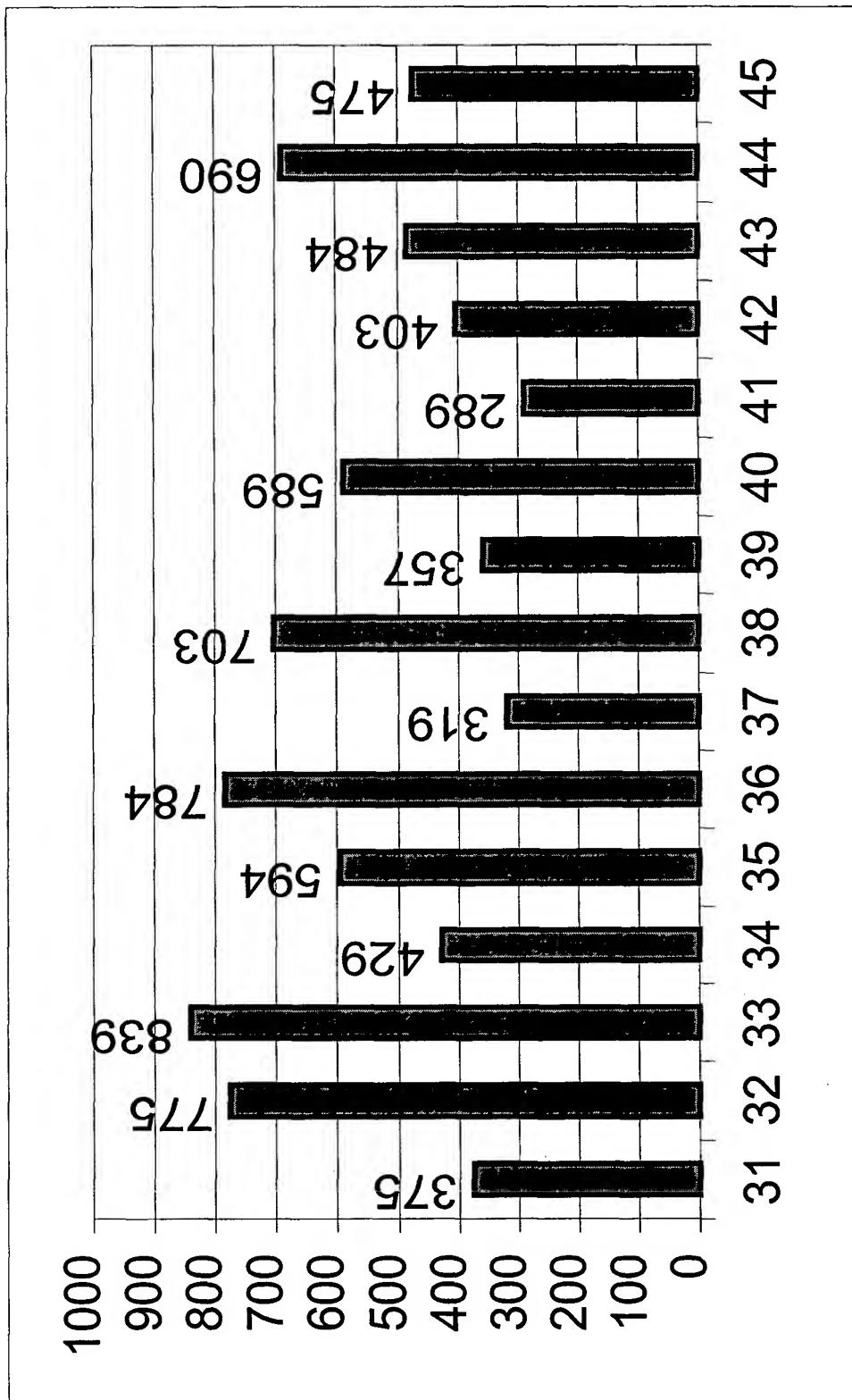


FIGURE 2c

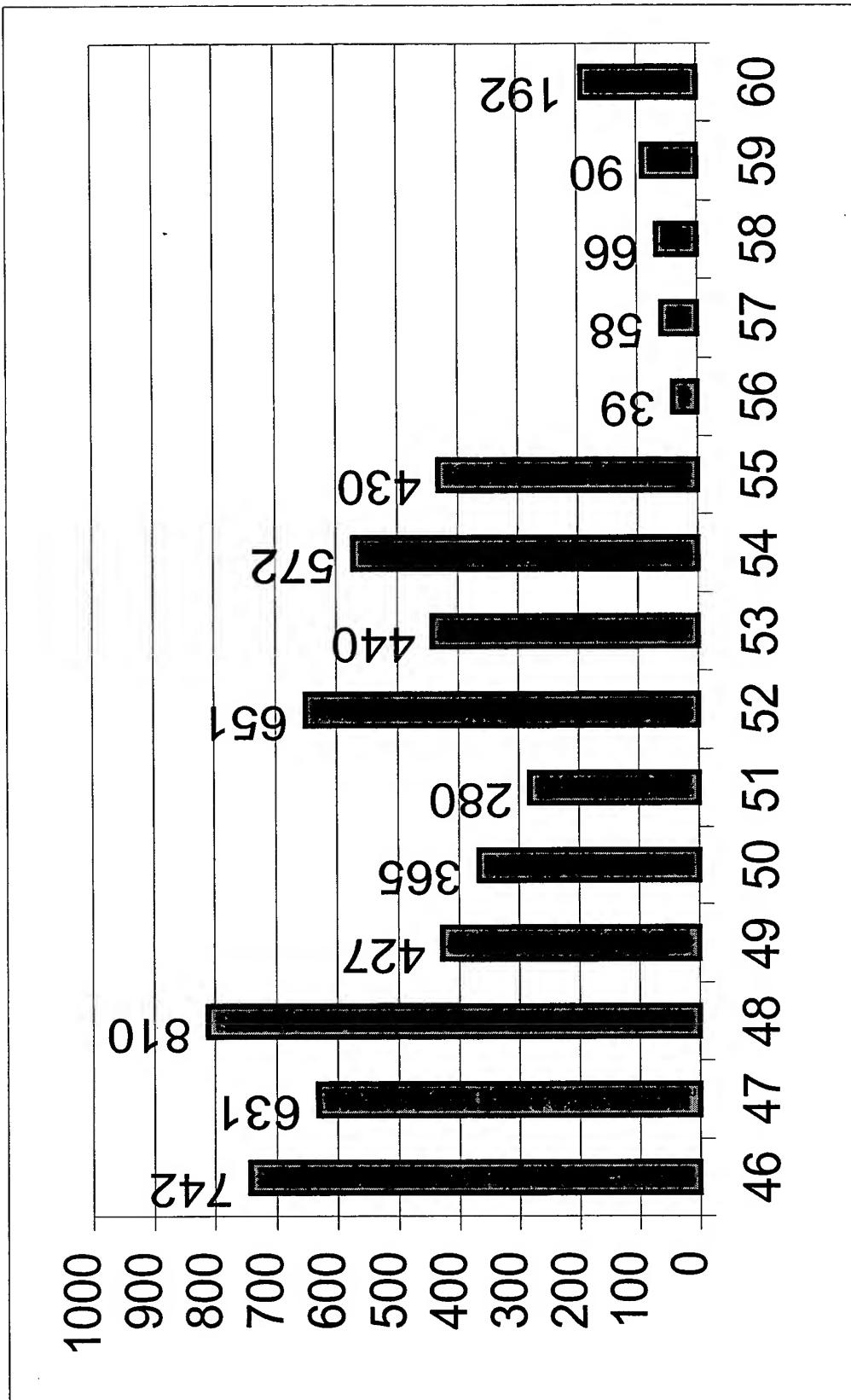


FIGURE 2d